dextrin, maltodextrin or derivatives thereof. One or more pharmacologically acceptable excipients are also present. The claimed composition comprises (a) a matrix consisting of lipophilic compounds with a melting point lower than 90°C and optionally amphiphilic compounds in which the active ingredient are at least partially incorporated, (b) an amphiphilic matrix, and (c) an outer hydrophilic matrix in which the lipophilic matrix and the amphiphilic matrix are dispersed.

The claimed composition is different to that disclosed by Anisson and Bird, as the Anisson and/or Bird compositions do not contain an active SCFA, but rather a different condensed inactive compound, i.e., a composite molecule. A SCFA covalently bonded to another agent, such as disclosed in Anisson and Bird, corresponds to a pro-drug which is different to the compound employed in the presently claimed compositions. The presently claimed composition contains at least one SCFA or a salt thereof as **single** molecule, without any link with the complex sugar and/or dietary fibre. The present composition is a homogeneous mixture of the complex sugar and/or dietary fibre and the SCFA or a salt thereof, and there is no covalent bond-esterification or lysis mechanism between the complex sugar and/or dietary fibre and the SCFA or a salt thereof in the presently claimed invention.

In addition, the dietary fibres or sugars are disclosed in the cited art as a carrier, i.e., an inactive agent only used to bring the fatty acid to the colon. This is to be contrasted with the complex sugar and/or dietary fibre of the present invention which is contained in the composition to synergize with the SCFA or salt thereof, i.e., as a further active ingredient able to produce a surprising and unexpected synergistic effect with the SCFA, or salt thereof.

The synergistic effect between the two components of the composition of the invention is demonstrated by Example 4 (specification, page 10) which describes a clinical study showing the improved effect obtained by administering a tablet containing the combination of active ingredients according to the invention with respect to the same dosage of the active ingredients taken alone (i.e., the combination of butyric acid + inulin vs. butyric acid alone or inulin alone) in the treatment of inflammatory bowel disease (IBD). The synergism is demonstrated by Table 1 and the Results section.

Moreover, it is well known in the art that the profile of compositions cannot be controlled with usual *in vitro* test methods where an enzymatic system is absent. Accordingly, dissolution tests commonly used to verify the release of drugs contained in such compositions are ineffective until a triggering agent (typically an enzyme) is introduced (see Jinhe Li, *et al*, PharmaSciTech, December 2, 2002; 3 (4) article 33 - of record – further copy presented herewith).

The present invention additionally comprises a multi-matrix composition wherein the release of the active ingredient (SCFA) is due to the specific structure of the matrices as recited in claim 23, in which the SCFA is dispersed. No additional triggering agents or enzymes are necessary to obtain the dissolution of the composition of the invention and the release of the drug.

This is demonstrated in the Exhibit to the attached Rule 132 declaration executed by Luigi Moro. That Exhibit is an experimental report describing tests performed by the applicant to evaluate the dissolution profile of the compositions of the invention, particularly tablets containing SCFA (calcium butyrate) and inulin. The test was performed according to the requirement of the USP Pharmacopeia (apparatus II, Jinhe

Li, *et al.*, PharmaSciTech, December 2, 2002; 3 (4), article 33, referenced above), without adding any triggering agent. The tested tablets showed a characteristic extended dissolution profile due to the specific multi-matrix structure of the product, which can be distributed in different regions of the intestinal tract (see the experimental report and Example 4 of the application).

Based on the showing, the Moro declaration concludes that none of the cited prior art discloses or suggests the synergistic technical effect achieved by the present invention, including the control of the release of the active through a specific multi-matrix structure of the composition.

In light of the above and the arguments and amendments presented in the Amendment dated June 28, 2011, it is clear that the obviousness rejection of claims 23-33, 45 and 46 over Anisson in view of Bird and Villa should be withdrawn. Such action is respectfully requested.

Favorable action is awaited.

Respectfully submitted,

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Attachments: Moro declaration and Exhibit; Jinhe, Li, *et al.*